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DALY, CROWLEY, MOFFORD & DURKEE, LLP
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354A TURNPIKE STREET
CANTON, MA 02021-2714

EXAMINER

WHITTINGTON, KENNETH

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2862

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09/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

The Amendment and Remarks thereto filed August 16, 2007 have been entered and considered.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 7199579, hereinafter '579. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because they are merely broader recitations in method form of the same claims.

Regarding claim 1, '579 recites a detecting a ferrous article comprising: generating a magnetic field signal indicative of an ambient magnetic field (See claim 2 as a whole, which includes claim 1);

generating a tracking signal which substantially follows at least a portion of said magnetic field signal (See claim 2 as a whole, which includes claim 1);

generating a too-far-behind signal which changes state when said magnetic field signal varies from said tracking signal by a predetermined amount; and changing step size of said tracking signal in response to transitions of said too-far-behind signal (See claim 2 as a whole, which includes claim 1); and

generating a first output signal having a first step size with a first digital-to-analog converter, generating a second output signal having a second step size larger than said first step size with a second digital-to-analog converter and summing said first and said second output signals to provide said tracking signal (See claim 2 as a whole, which includes claim 1).

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Regarding claim 3, '579 recites said changing step size comprises: counting with a first counter for providing a first count signal to said first digital-to-analog converter; and counting with a second counter for providing a second count signal to said second digital-to-analog converter, wherein in response to a first state of said too-far-behind signal said second counter is stepped in association with a terminal count of said first counter, and in response to a second state of said too-far-behind signal said second counter is also stepped (See claim 4 as a whole, which includes claims 1-3).

Regarding claim 11, '579 recites controlling said tracking signal to include steps associated with the first step size when said magnetic field varies from said tracking signal by less than the predetermined amount and to include larger steps associated with the second step size when said magnetic field varies from said tracking signal by more than a predetermined amount (See claim 2 as a whole, which includes claim 1).

Allowable Subject Matter

Claims 4-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Regarding claims 4-7, the prior art does not show or teach a POSCOMP signal in combination with a first and second digital-to-analog converters having different step sizes as recited in the claims and in combination with the other features of the claims.

Regarding claims 8-10, the prior art does not show the first and second counters as recited in the claims and in combination with the other features of the claims.

It is also noted that all claims would also be allowable if a proper Terminal Disclaimer were filed to overcome the Double Patenting rejections noted above. The following is a statement of reasons for the indication of allowable subject matter: regarding these claims, the prior art does not show or teach a first and second digital-to-analog converters having different step sizes as recited in the claims and in combination with the other features of the claims.

Response to Arguments

Applicant's arguments filed August 16, 2007 with respect to the Double Patenting rejections have been fully considered but they are not persuasive.

Regarding the only remaining rejections, i.e., the Double Patenting, Applicants have asserted that the prohibition

contained in 35 USC 121 prevents the rejection noted above and have pointed to MPEP 804.01 for support.

While such a statement is accurate in certain instances, such prohibition does not apply if the claims in the issued Patent and/or the divisional application are no longer consonant with the claims restricted that were the subject of the Restriction Requirement, i.e., the claims were changed in material respects and/or the line of demarcation no longer exists. See MPEP804.01(B).

In the instant case, the evidence claims of each group in the Restriction Requirement made on March 21, 2006 no longer exist. Applicants' amendments to the claims in both the parent and the present application have rendered the claims no longer consonant with the originally restricted claims and the lines of demarcation no longer exist. Thus, the prohibition under 35 USC 121 does not apply and the Double Patenting rejections stand.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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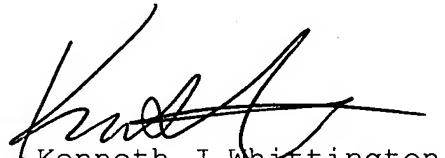
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

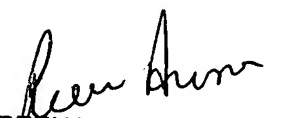
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Kenneth J Whittington
Examiner
Art Unit 2862

kjw



REENA AURORA
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800